R E P O R T R E S U M E S

ED 013 290 VT 000 619

COURSE OUTLINE FOR HORTICULTURE-SERVICE OCCUPATIONS.
OHIO STATE UNIV., COLUMBUS, CENTER FOR VOC. EDUC.
REPORT NUMBER OSU-AGDEX-940-017-00 PUB DATE AUG 65
EDRS PRICE MF-$0.25 HC-$1.28 32P.

DESCRIPTORS- *COURSES, *VOCATIONAL AGRICULTURE, *ORNAMENTAL HORTICULTURE OCCUPATION, HIGH SCHOOLS, BIBLIOGRAPHIES, EMPLOYMENT OPPORTUNITIES, *ORNAMENTAL HORTICULTURE, *PROGRAM DEVELOPMENT,

THE PUBLICATION OF THIS AND OTHER DOCUMENTS IN THE SERIES ON OFF-FARM AGRICULTURAL OCCUPATIONS WAS THE RESULT OF AN EFFORT TO ASSIST STATE AND LOCAL LEADERS IN DEVELOPING TRAINING PROGRAMS. PRIME CONSIDERATION WAS GIVEN TO DATA FROM SEVERAL STATE STUDIES AND DEVELOPMENT WAS BY A NATIONAL TASK FORCE. THE PURPOSE OF THE COURSE IS TO ASSIST HIGH SCHOOL STUDENTS TO DEVELOP COMPETENCE FOR OCCUPATIONAL ENTRY AS SERVICE WORKERS IN NURSERIES, GARDEN CENTERS, GREENHOUSES, GOLF COURSES, AND GROUND MAINTENANCE DEPARTMENTS. IT IS UNIQUELY APPROPRIATE FOR DISADVANTAGED STUDENTS INTERESTED IN HORTICULTURE. IT DESCRIBES THE OCCUPATIONS, PERSONS TO BE SERVED, TEACHING MODULES INCLUDED, NATURE OF THE COURSE, AND THE PERSONNEL AND SETTING INVOLVED IN COURSE DEVELOPMENT. TEACHING MODULES, PUBLISHED SEPARATELY, INCLUDE (1) OCCUPATIONAL OPPORTUNITY, (2) PLANT IDENTIFICATION, (3) PROPAGATION, (4) GROWING, (5) SOILS MEDIA, (6) PLANT PESTS, (7) PLANT GROWING STRUCTURES, (8) SALESMANSHIP, (9) LAWNS AND TURF, (10) SMALL POWER EQUIPMENT, (11) ORNAMENTAL PLANT MATERIALS AND LANDSCAPE STRUCTURES, AND (12) HUMAN RELATIONS. SUGGESTED TIME ALLOTMENTS, SUPPORTING EDUCATION, METHODS FOR INTRODUCING THE COURSE, USE OF COURSE MATERIALS, EVALUATIVE CRITERIA, INSTRUCTIONAL MATERIALS, AND REFERENCES ARE INCLUDED. THIS DOCUMENT IS AVAILABLE FOR A LIMITED PERIOD AS PART OF A SET (VT 000 619 - 000 631) FOR $7.25 FROM THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION, THE OHIO STATE UNIVERSITY, 980 KINNEAR ROAD, COLUMBUS, OHIO 43212. (JM)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

I. R. D.
$5.25 Complete Set

~~Agdex~~
~~940~~
OSU-AGDEX-940017-00

ED013290

COURSE OUTLINE

FOR

HORTICULTURE — SERVICE OCCUPATIONS

The Center for Research and Leadership Development
in Vocational and Technical Education

The Ohio State University
980 Kinnear Road
Columbus, Ohio, 43212

The development of these materials was supported by a grant from the
Division of Adult and Vocational Research
United States Office of Education

August, 1965

VT000619

M E M O R A N D U M

TO: The ERIC Clearinghouse on Vocational and Technical Education
The Ohio State University
980 Kinnear Road
Columbus, Ohio 43212

FROM: (Person) James W. Hensel (Agency) The Center for Vocational and Technical Education

(Address) 980 Kinnear Road, Columbus, Ohio 43212

DATE: August 7, 1967

RE: (Author, Title, Publisher, Date) "Course Outline for Horticulture - Service Occupations," The Center for Vocational and Technical Education, August, 1965.

Supplementary Information on Instructional Material

Provide information below which is not included in the publication. Mark N/A in each blank for which information is not available or not applicable. Mark P when information is included in the publication. See reverse side for further instructions.

(1) Source of Available Copies:
Agency The Center for Vocational and Technical Education
Address 980 Kinnear Road, Columbus, Ohio 43212
Limitation on Available Copies No Limit Price/Unit $7.25/set
(quantity prices)

(2) Means Used to Develop Material:
Development Group National Task Force
Level of Group National
Method of Design, Testing, and Trial Part of a funded project of the USOE, OE-5-85-009; materials based on research from state studies; see preface material in the course outline.

(3) Utilization of Material:
Appropriate School Setting High School
Type of Program High school class in horticulture--service occupations
Occupational Focus Service workers at nurseries, garden centers, greenhouses, etc.
Geographic Adaptability Nationwide
Uses of Material Instructor course planning
Users of Material Teachers

(4) Requirements for Using Material:
Teacher Competency Background in horticulture
Student Selection Criteria Designed for the less able high school student, goal in horticulture service occupations.
Time Allotment Estimated time listed in module. (P)

Supplemental Media --
Necessary x
Desirable
(Check Which)

Describe Suggested references given in module. (P)

Source (agency)
(address)

Content of a Course for

HORTICULTURE - SERVICE OCCUPATIONS

Teaching Modules Making Up This Course

Note: It is not implied that the sequence in which the modules are presented below is the order in which they are to be taught.

1. Exploring Occupational Opportunities in Ornamental Horticulture
2. Identifying Horticultural Plants
3. Propagating Horticultural Plants
4. Growing Horticultural Plants
5. Using Soil and Other Plant Growing Media Effectively
6. Recognizing and Controlling Plant Pests
7. Constructing, Maintaining, and Using Plant Growing Structures
8. Agricultural Salesmanship
9. Establishing and Caring for Lawns and Turf
10. Operating, Repairing, and Maintaining Small Power Equipment
11. Using and Caring for Ornamental Plant Materials and Landscape Structures
12. Human Relations in Agricultural Occupations

Publications on Off-Farm Agricultural Occupations
Available From
The Center for Research and Leadership Development
in Vocational and Technical Education
The Ohio State University
980 Kinnear Road
Columbus, Ohio, 43212

This publication is one of a series relating to Off-Farm Agricultural Occupations developed at the Center for Vocational and Technical Education under a grant from the Division of Adult and Vocational Research, U.S. Office of Education. Each of these publications was designed for a specific purpose. However, they are designed to complement and reinforce each other. It is suggested that persons using any of these materials will want to familiarize themselves with the other publications in this series. Following is a complete listing of this series.

1. Policy and Administrative Decisions in Introducing Vocational and Technical Education in Agriculture for Off-Farm Occupations

2. Vocational and Technical Education in Agriculture for Off-Farm Occupations

3. Summary of Research Findings in Off-Farm Agricultural Occupations

4. Planning and Conducting Cooperative Occupational Experience for Off-Farm Agriculture

5. Occupational Guidance for Off-Farm Agriculture

6. Horticulture - Service Occupations
(Course outline and twelve modules)

7. Agricultural Supply - Sales and Service Occupations
(Course outline and twelve modules)

8. Agricultural Machinery - Service Occupations
(Course outline and sixteen modules)

9. Agricultural Chemical Technology
(Course outline and nine modules)

PREFACE

This publication is one of a series developed by a national task force at The Center for Vocational and Technical Education to assist state and local vocational education leaders in developing programs to prepare youth and adults for employment and/or advancement in off-farm agricultural occupations.

This project had its origin in the National Research Coordination Conferences on Off-Farm Agricultural Occupations sponsored by The National Center for Advanced study and Research in Agricultural education and the Agricultural Education Branch of the U.S. Office of Education in May of 1963 and January of 1964. These conferences were designed to assist states in undertaking studies of off-farm agricultural occupations training needs.

Subsequently, the Center was given a grant by the Bureau of Adult and Vocational Research to synthesize these studies, develop needed instructional and program materials, and conduct training conferences on their use.

The task force of 30 people from 16 states has included personnel with a wide range of backgrounds and responsibilities in agricultural education, vocational education, agricultural technology, and agricultural industry. Several project advisory meetings were held to secure needed counsel from diverse, but relevant groups and to help the task force maximize the potential benefits and uses of these materials.

Primary leadership for the development of these publications was provided by Mr. James Utzinger. Assisting him on the project were Mr. Peter Woteweic, Mr. Ramsey Groves, Mr. Robert Kerwood, Mr. James Christiansen, and Mr. Darrel Parks.

In developing these instructional materials, prime consideration was given to the data revealed by the studies of agricultural business and employee training needs conducted in several states. Current and projected employment opportunities dictated the areas in which instructional materials were developed. In addition, these studies identified those occupations which require knowledge and skill in agriculture. They also contributed to the development of the publication series through the identification of specific compentencies needed by individuals for entry and persistence in agricultural occupations.

Members of the task force were aided in the development of these publications through personal visitations to outstanding exisiting off-farm agricultural occupational programs. Frequent consultations with trade association educational committees and agricultural industry leaders concerned with personnel development were helpful

in further "keying" these materials to employment needs. Existing materials were carefully reviewed and evaluated in terms of their utility in the preparation of these workers and, when suitable, were recommended as a part of these publications. References are also made to other instructional materials and sources designed to aid teachers and supplement and reinforce project materials.

Following the first draft of each publication by the Center, copies were sent to a wide range of knowledgeable individuals for review and evaluation. Reviewers included experienced teachers in vocational agriculture and other vocational services, college and university specialists in the appropriate subject-matter area, supervisory and research personnel, and agricultural business and industrial leaders. Many of their comments and suggestions were incorporated into the revision. However, the final responsibility for the content rests with the project staff.

It should be recognized that these materials are still developmental in nature. Although considerable time and effort have been expended to bring them to this stage of development, it is recognized that they are not the final answer in planning and conducting off-farm agricultural education programs. We hope that the experiences gained through the utilization of these materials during the coming year will assist us in their further refinement.

Your attention is directed to the evaluation form which accompanies each module. Persons using these materials are asked to complete the form and return it to the Center. We believe these evaluations, based on actual experiences, will provide a valuable basis for further improvement and will help identify voids in existing materials.

ROBERT E. TAYLOR
Director
The Center for Research and
Leadership Development in
Vocational and Technical Education

INTRODUCTION

Existing vocational horticultural programs are being expanded and new ones are being included in the curricula of secondary schools throughout our nation. Research shows that many occupational opportunities exist in the broad area of horticulture at all levels of preparation. Job opportunities exist in horticulture for those with a high school education, as well as for those with college degrees. This is due to the strong demand for horticultural products and services and to the fact that many areas are becoming rapidly urbanized, thus changing the pattern of agriculture from the production of field crops and livestock to that of more intensive types of operations typical of the horticultural industry.

The Vocational Education Act of 1963 has facilitated the establishment of programs to prepare personnel for jobs in off-the-farm agricultural occupations. In order to prepare workers to assume these off-farm jobs requiring knowledge and skills in agriculture, it is necessary to establish programs which provide the appropriate classroom, laboratory, and occupational experiences necessary to develop the competencies that workers need for success on the job. Herein lies the opportunity and challenge for those interested in preparing service workers for jobs in ornamental horticulture on the high school level. Teaching high school horticulture can be extremely challenging, stimulating, and rewarding. It can also be very demanding of the teacher's time and efforts.

The materials in this course should be considered developmental in nature and as such should not be regarded as being in final form. The personnel developing these materials realize that this is but a first step in developing a course in horticulture to prepare service workers for off-farm agricultural occupations. As with all such efforts, it will be found that adjustments and improvements can be made based on the experience gained using these materials. Every effort was made within the limits of the time available to identify the essential modules needed for the course and to develop the competencies required within each module. However, it is recognized that the materials as presently developed can be improved. Consequently, the Center earnestly solicits comments and suggestions for improvements from those persons using these materials.

HORTICULTURE - SERVICE OCCUPATIONS

CONTENTS

	Page
Purpose	1
Occupations for Which Course is Intended	1
Suggested Time Allotments	1
Persons to be Served	1
Suggested Supporting Education	3
Suggestions for Introducing the Course	3
Teaching Modules Making Up the Course	5
Nature of the Course	6
Suggestions for Using the Course Materials	6
Cooperating with Representatives of the Horticultural Industry	9
Providing Supervised Cooperative Occupational Experience	9
The Setting for the Development of the Course	10
Involvement of Personnel from Horticulture and Agricultural Education in the Development of the Course	10
Suggestions for Evaluating the Course	12
Suggested Instructional Materials and References for the Course	13

Course For

HORTICULTURE - SERVICE OCCUPATIONS

Purpose

The purpose of this course is to assist high school students to develop the degree of competence needed for occupational entry as service workers in such establishments as nurseries, garden centers, greenhouses, golf courses, and ground maintenance departments.

Occupations for Which the Course is Intended

Assistant groundskeeper
Cemetary employee
Garden center employee
Golf course employee
Greenhouse workers
Nursery worker
Parks employee

Suggested Time Allotments

At school		
Class instruction	325	hours
Laboratory experience	615	hours
Total at school	940	hours
Occupational experience	508	hours
Total for course	1,448	hours

Persons to be Served

This course is specifically designed to serve high-school youth interested in preparing for jobs as horticultural service workers. The course will be especially helpful in preparing those persons who may be socially or economically deprived. However, this course should not be used as a "dumping ground" in which only students considered as "academic misfits" are enrolled. Instead, the course will serve uniquely those youth who are disadvantaged or handicapped as a result of social barriers related to language, values, incentives, or outlook. It will also serve those persons having the necessary ability, but lacking the necessary economic resources required to make full use of their potential. Many of the young people who could benfit from such a course may be further described as:

Being weak in communications skill

or

Having little success or sense of accomplishment in academic endeavors

or

Having difficulty in making decisions involving judgment

or

Being either a poor reader or a non-reader

or

Being overage for their particular grade level

or

Being slow learners or under-achievers

or

Being irregular in school attendance

or

Failing to participate to any extent in cultural activities, including school functions

These course materials are not designed to prepare students to become managers or to take initial jobs where a high degree of judgement is required. Most persons completing this course should assist or work under supervision with another person. The tasks which the graduates of this course could be expected to preform vary widely in degree of difficulty. Examples of such tasks are:

Where Propagating Takes Place	In the Landscape	In the Park
Building flats	Applying fertilizers	Applying fertilizers
Handling growing containers	Building fences	Assisting in spraying trees and shrubs
Mixing potting soil	Installing tile	Building outdoor fireplaces
Putting sterilizing covers in place	Laying sod	Erecting signs
Removing shading compounds	Planting trees and shrubs	Keeping the grounds mowed and weed free
Repairing sash	Mowing grass	Repairing walks and driveways
Working ground beds	Preparing seedbeds	
	Trimming hedges	
	Pruning ornamentals	

The area of horticulture has the potential for serving disadvantaged students in such a way as to provide opportunities for employment and to give renewed hope and a sense of accomplishment that might not be obtained in other channels of education today. Programs other than horticulture could also be adapted to serve disadvantaged youth. If we will keep this in mind and in proper perspective, we should not fear any stigma that agriculture, or more specifically, horticulture, will be identified only with the disadvantaged. Rather, we should think of agriculture as broadening its horizons to meet the needs of more people on a greater scale than ever before. The agricultural teacher serving average and below average students has a wonderful opportunity to be of real service to boys and girls who desperately need an understanding teacher. It may make all the difference in the world to them.

Suggested Supporting Education

Wherever possible, supporting education should be designed to fit the specific abilities and needs of these students. Such education might include:

1. Consumer economics
2. General or business mathematics
3. General or earth science
4. Remedial work in reading and/or communications skills
5. Shop courses in carpentry, electricity, and plumbing
6. Vocational agriculture (especially the first two years)

Suggestions for Introducing the Course

At the beginning of the course, explain to the students what they will be studying and activities in which they will be engaging. Stress that in order for students to be successful in service occupations in greenhouse or landscape horticulture they must begin to develop attitudes, understandings, knowledge, and abilities which are essential for such success. Point out that the following are some of the more important requirements for success on the job:

1. Acquire a good attitude and outlook toward the job to be performed.
2. Learn good work habits.
3. Become safety conscious.
4. Gain basic understandings essential to satisfactorily completing assigned tasks.
5. Understand and appreciate common problems associated with growing and caring for plants.
6. Develop skill in the use of hand and power tools.
7. Develop skill in practices associated with caring for and growing plants.
8. Work well with other people.

Point out that evidence of progress in areas such as those listed on the preceding page will affect both the evaluation the students receive in the course as well as the type of recommendation they will receive for initial job entry.

Explain to the students specific responsibilities they have in getting the most from the course. This might include such things as:

1. Being regular in attendance
2. Coming to class prepared for the day's activities (work clothing and shoes, rainwear, books, and classroom supplies as needed)
3. Making up any missed work
4. Following directions
5. Being safety minded

Explain in general terms the areas to be covered by course instruction. These will be:

1. Plants
2. Soils
3. Structures
4. Safety
5. Equipment
6. Work Habits
7. Career Opportunities
8. Human Relations

Explain the nature of the supervised cooperative occupational experience program in which they will be engaged.

In order to stimulate interest and orient the student to the type of study involved in the course areas, activities such as these might be followed:

1. Display and allow students to work with plants which appeal to their curiosity. Such plants might include the sensitive plant (Mimosa pudica), the Venus fly trap (Dionaea muscipula), miniature trees, Bonsai, or interesting tropical plants. These plants should raise questions which will lead into the subject matter of the course.

2. Very early in the course, take the class to a large commercial greenhouse or nursery. Ask the owner to explain what job opportunities are available to boys and girls willings to prepare for them. Careful advanced planning should be made with the owner-operator so that his remarks will be aimed at the particular occupations for which preparation of students is needed.

3. Use 2" x 2" colored slides to show the many areas in which horticultural plants are important to us. Stress that many workers are required to care for the plants we need. The need for many plants means that job opportunities exist. Make this point very clear to students.

4. Have a recent high-school graduate who is successfully employed in one of the areas for which the course is designed appear before

the class and discuss his particular job in terms of duties, opportunities, and knowledge required for the job.

5. Beginning with the first day of the course, actively involve students in some type of meaningful activity. This should serve as a sample of things to come. This might be seed identification, recognizing soil conditioners, or identifying plants. Impromptu contests might be used with small prizes offered. Care should be used not to embarrass any student, however.

6. Present a color film which appeals to the sense of beauty in landscaping. Use the approach with the students that they will play an important role in making our homes, our communities, and our nation a more beautiful place in which to live and work. Stress pride and sense of accomplishment.

7. Display two plants of the same type, one healthy and one obviously unhealthy. Emphasize that this particular course will provide the students with opportunities to learn how to grow and maintain healthy, productive plants, whether it be in the greenhouse, in the nursery, or out on the golf course.

Teaching Modules Making Up the Course

1. Exploring Occupational Opportunities in Ornamental Horticulture
2. Identifying Horticultural Plants
3. Propagating Horticultural Plants
4. Growing Horticultural Plants
5. Using Soil and Other Plant Growing Media Effectively
6. Recognizing and Controlling Plant Pests
7. Constructing, Maintaining, and Using Plant Growing Structures
8. Agricultural Salesmanship
9. Establishing and Caring for Lawns and Turf
10. Operating, Repairing, and Maintaining Small Power Equipment
11. Using and Caring for Ornamental Plant Materials and Landscape Structures
12. Human Relations in Agricultural Occupations

Nature of the Course

The course is one in horticulture for high school students designed to prepare disadvantaged youth for what traditionally have been called "semi-skilled" jobs. Other courses are needed to train for more highly skilled jobs.

Basically, the course is not highly technical in nature. Particular attention must be given by the teacher in developing an easily understood vocabulary in both classroom activities and student reference materials.

The major approach to teaching the course is to move from the known to the unknown. Comparisons are made between those things common to the students' experience and those things which are not common to the students' experience, but which are the desired learnings of the course.

An attempt has been made in the materials to emphasize the need for motivation and interest-building before the subject materials is presented.

The course is intended to be essentially of a laboratory type where students are actively involved as much as possible.

The course should involve supervised cooperative occupational experience wherever possible. Experience is a vital part of the training program. Provisions should be made for students to have as much experience at school, and on-the-job so far as is possible.

The course materials imply relating subject matter content and practice at school or on the job.

The assumption has been made that adequate time will be scheduled for the students to prepare for work, have a work period of realistic length, and clean up before reporting for other classes.

The success of the course depends upon a dedicated teacher, adequate facilities, and an administrative climate that provides understanding and support for the objectives of the program.

The modules of the course have been designed to assist teachers in preparing lessons by providing key subject matter content, some suggested teaching-learning activities, suggestions for occupational experience, and sources of related information. It is hoped that the information contained in the modules will suggest additional teaching-learning activities that can be developed by the teacher and students. Perhaps teachers, using the experience gained by dealing with these course materials, will develop other instructional modules in horticulture which could be shared with teachers of horticulture across the nation.

Suggestions for Using the Course Materials

This course is made up of twelve modules. Each module is a complete self-contained part of the course that may or may not be taught in the

sequence given in this course outline. Not all modules may be needed to meet the needs of the students to be taught. The experience and educational background of the students will dictate the modules that should be included in the course. The background of the students and their ability level will determine the precise manner in which these materials will be used. A teacher who might use this material with students of higher ability must "upgrade" it. With such students it will be necessary to prepare for entry into occupations requiring a higher degree of competence than that outlined in these materials.

Each module consists of (1) a major teaching objective, (2) a suggested time allotment for school instruction and occupational experience, (3) an introduction to the module, (4) the competencies to be developed, (5) suggested instructional materials and references for use in teaching the module, and (6) suggestions for evaluating the educational outcomes of the module.

For each competency there are four kinds of information (1) subject matter content, (2) suggested instructional materials and references, (3) suggested occupational experience needed to develop each competency, and (4) suggested teaching-learning activities.

The subject matter content provides an overall view of the important aspects of each competency that should be stressed by the teacher. It may include charts, table graphs, drawings, etc. The content may be in topical outline or paragraph form. The subject-matter content, as it is included in each competency, is not complete enough for all lesson preparation. The teacher must use the references at the end of each competency, and other references with which he may be acquainted, to supply the additional information that he needs to teach.

Under the section entitled "Suggested Instructional Materials and References," are listed those materials that could be used by the instructor in developing the competency. They are suggestions which should help the instructor in identifying materials and references that could be used in teaching each competency.

Specific activities that may help the teacher to develop the competence of his students are listed under "Suggested Teaching-Learning Activities." In the main, these Activities emphasize student involvement. The teacher should supplement each list with film strips, group activities, teacher-made aids, movies, 2" x 2" slides, and other visual aid materials with which he is familiar that will improve his instruction. Care should be exercised, however, to avoid making the course a classroom teacher-center learning situation.

Under "Suggested Occupational Experience" are those activities that should be carried out on-the-job at the training center which will further develop the competency. These activities are just as important to teaching each competency as are subject matter content and teaching-learning activities.

Make certain that what is being taught in the school classroom and laboratory is also being followed up at the training center.

In teaching disadvantaged students, some of whom may be on the verge of dropping out of school, the teacher will, in many cases, be faced with the problem of changing a poor outlook on life and poor attitude toward the school in general, or the course in particular. Perhaps the greatest single task of the teacher will be that of motivating the group and restoring once again the desire to learn. This major task of motivation has been kept in mind as this course has been developed. Suggestions have been made in each module for creating interest and inspiring the student.

The teacher will have to avoid taking too much for granted. Do not assume that the students have the same level of judgement as the teacher; otherwise, serious accidents or very costly mistakes may occur. This means that the teacher will have to do more showing, more pointing out, and more looking over shoulders. He will have to give specific, definite instructions, and positive direction. One simply cannot suggest action and rely on the students to complete the job. Interest and ambition may often be absent on the part of the students and a step-by-step procedure will be in order, at least during the first several weeks of the course. This means that a great amount of patience will be required as it takes considerable time to train the students to do assigned tasks well.

There will be mistakes and subsequent damage. Glass in greenhouses and shovel handles may be broken. There will be accidents if extreme caution is not taken. In the beginning, there may be some pranks and vandalism. The teacher, in some cases, will need the ability to "grin and bear it."

The teacher may have problems in providing instruction in areas where some background in agriculture would be desirable to city students enrolled in the course. There will be problems in drawing on student experiences for classroom teaching when students lack agricultural experience. Specific examples of how the teacher might approach this problem are given in the modules.

If plant materials and supplies are to be ready and available when needed for the course, it will be necessary to program these materials well ahead of the time that they will be needed. The teacher will need to arrange to have help in caring for the plants during week-ends and vacation periods. It takes times for plants to grow. It is suggested that the teacher prepare a "what to do this week" type of calendar in which future needs can be listed.

It can be seen that the teacher's job will be extremely challenging. It would appear that the most important things that the teacher may accomplish in the program, besides preparing for occupational entry, is to change attitudes and motivate to the point that students will have renewed hope and success, become economically sustaining, and have a new outlook on life. For the first time, some students may find a reason for being. What a terrific sense of satisfaction the teacher should get in helping others grow in this way.

In summary, the key elements required for successfully conducting this course are:

1. A teacher who motivates, understands, exhibits patience, has enough properly utilized time, and provides detailed instruction.

2. Adequate, realistic facilities for both at-school instruction and for occupational experience.

3. Proper supervision and administration

Cooperating with Representatives of the Horticultural Industry

It is imperative that representatives of local horticultural businesses be involved in organizing and implementing this program in a local school. These people can provide valuable assistance and advice as to the structure of the course in the school, suggesting equipment to be used in the instructional program, identifying training stations for enrollees, and helping to place enrollees upon completion of the course. Relationships should also be established with state or regional horticultural associations. This will help the instruction in placing enrollees upon graduation.

Providing Supervised Cooperative Occupational Experience

Supervised occupational experience is an integral part of this course. Experience gained while on the job cannot be duplicated exactly in the classroom or the school laboratory. The occupational experience program should, if at all possible, be carried on at the time the student is attending classes and classroom instruction should be implemented on the job. In the event that occupational experience cannot be provided concurrently with classroom instruction, other provisions should be made to provide this experience. Often occupational experience for landscape industry is most actively engaged in a wide range of activities. It would be highly desirable for students to have one-half day released time from school during the May-June period to obtain this experience. There can be more flexibility in the schedule for providing occupational experience in the greenhouse since the element of seasonality is not so critical here as with landscaping.

Each department offering cooperative occupational experience should design a program appropriate to the local area. Careful attention should be given to the selection of the cooperative centers that are to provide these experiences. It may be necessary for the teacher to inform the owners and managers of the training centers of the objectives of the program and their responsibilities in cooperatively developing the best possible training program for the student-trainee. Providing occupational experience for off-farm occupations in agriculture is discussed in detail in the publication entitled, Planning and Conducting Cooperative Occupational Experience in Off-Farm Agriculture, prepared by the Center.

The Setting for the Development of the Course

It was a growing awareness of the urgent need for more definite information on the requirements for occupational education involving competencies in agriculture that brought state leaders in agricultural education and representatives from the United States Office of Education together in planning conferences at the then National Center for Advanced Study and Research in Agricultural Education at the Ohio State University in May, 1963, and January, 1964. At these planning conferences, procedures and outlines for investigating the off-farm occupations in agriculture were developed. In January, 1965, and April, 1965, advisory conferences were held at the National Center to examine preliminary research reports. The National Center was urged to develop curriculum guides and course materials that would implement these findings. Due to the magnitude and variety of occupations involving competencies in agriculture, those in attendance at this conference recommended that the National Center prepare course materials in four areas; namely, horticultural service occupations at the high-school level, agricultural supply--sales and service at the high-school level and post-high-school level; agricultural mechanization service occupations at the post-high school level; and agricultural chemicals at the technician level.

As a result of the action by this body, and the receipt of a grant from the Division of Adult and Vocational Research of the U.S. Office of Education, personnel were brought to the Center to develop program guides and course materials in the areas identified by the conference committees.

The selection of the areas in which to develop course materials, the occupations for which the courses were to be developed, and the content of the courses, were determined by the research reported to the Center by the states. This information may be reviewed in the publication entitled, Summary of Research Findings in Off-Farm Agricultural Occupations, prepared by the Center.

Involvement of Personnel from Horticulture and Agricultural Education in the Development of the Course

Throughout the development of the course materials, personnel from the fields of horticulture and agricultural education were consulted for advice and suggestions both as to the content of the course and ways of implementing the instruction. Personnel consulted included owners of nurseries, representatives of horticultural trade associations, horticultural instructors in high school, area schools, and universities, institutional grounds supervisors, and others.

As each module was developed, it was submitted to industry representatives, teachers, and university personnel in different states for technical review and criticism. The suggestions made by these persons were evaluated and incorporated into the modules wherever applicable.

The persons listed below gave unstintingly of their time in reviewing the tentative materials developed. Their assistance, suggestions, and constructive criticisms are gratefully acknowledged. However, the final responsibility for selection of content which exists in these materials rests on the staff personnel who developed them at the Center.

Dr. Evan K. Alban
Professor of Vegetable Crops
Department of Horticulture and Forestry
The Ohio State University
Columbus, Ohio

Mrs. Rayalene Brizendine
Guidance Counselor
Pleasant View High School
Grove City, Ohio

Mr. Ray Brush
American Association of Nurserymen, Inc.
835 Southern Building
Washington, D. C.

Mr. Donald Casey
Guidance Counselor
Pleasant View High School
Grove City, Ohio

Mr. Richard D. Clugston
Vocational Agriculture Department
Bowie High School
900 S. Cotton Avenue
El Paso 1, Texas

Dr. C. C. Drawbaugh
Department of Agricultural Education
Rugers University
6 Seminary Place
New Brunswick, New Jersey

Mr. Foster Franks
City of Columbus
Parks and Forestry Division
Columbus, Ohio

Mr. Clyde Gordon, Superintendent
Spring Grove Cemetery
4520 Spring Grove Avenue
Cincinnati, Ohio

Mr. Roy L. Hoffman
Hoffman Greenhouses
658 Rome-Hilliard Road
Hilliard, Ohio

Dr. Robert P. Holdsworth, Jr.
Professor of Zoology and Entomology
The Ohio State University
Columbus, Ohio

Mr. Allan Keil
Grove City Garden Center
411 Columbus
Grove City, Ohio

Dr. J. P. Mahlstede
Head of Department of Horticulture
Iowa State University
Ames, Iowa

Dr. Kennard S. Nelson
Jednak Floral Company
Columbus, Ohio

Mr. Darrel Parks, Graduate Assistant
Agricultural Education
The Ohio State University
Columbus, Ohio

Dr. Robert E. Partyka
Associate Professor
Botany and Plant Pathology
The Ohio State University
Columbus, Ohio

Mr. Harold L. Porter
Chief of Plant Industry
Ohio Department of Agriculture
Reynoldsburg, Ohio

Dr. E. C. Robert, Associate Professor
Turf Management
Department of Horticulture
Iowa State University
Ames, Iowa

Mr. Lloyd R. Roof
Landscape Superintendent
The Ohio State University
Columbus, Ohio

Dr. Robert W. Schery
Lawn Institute
Route 4
Marysville, Ohio

Dr. Harry K. Tayama
Assistant Professor
Cooperative Extension Service
The Ohio State University
Columbus, Ohio

Mr. E. C. Volz
Professor of Floriculture
Department of Horticulture
Iowa State University
Ames, Iowa

Dr. Ralph J. Woodin
Professor of Agriculture Education
The Ohio State University
Columbus, Ohio

Suggestions for Evaluating the Course

1. Student evaluation

   Practical tests are more appropriate than written quizzes and examinations. Evaluate in terms of objectives which were established for this course. Perhaps the student should be evaluated in terms of:

   a. General outlook as reflected by attitude, cooperativeness, and preparedness for work. (Teacher should be acutely aware of progress in this area.)

   b. Work habits (quantity and quality of production, safety mindedness, dependability)

   c. Results of practical examinations

   d. Written quizzes and examinations

2. Program Evaluation

   The teacher should keep the following program records for purposes of evaluation:

   a. Number of students enrolled

   b. Number of students completing the course

   c. Reasons for dropping out

   d. Number of students entering horticulture service jobs for which they were trained.

   e. Nature of the jobs held

f. The type of jobs the students are holding after one year; after five years

g. Enrollment trends in the course

h. Employer evaluation of the quality of work being aacomplished

In the final analysis, the success of the course will be based on:

a. Whether or not the students were successfully placed

b. Degree of success on the job as reported by the employer

c. Persistency and advancement in the horticultural industry

In order to make this evaluation, it will be necessary to conduct follow-up studies of the students. Due to the tremendous mobility of our labor force today, it is suggested that the teacher develop a working relationship with the student so that students will willingly correspond with the teacher as to occupational status for at least three years following graduation. The name and address of a person through whom the location of the student may always be known may help to keep in contact with students.

Suggested Instructional Materials and References for the Course

Instructional materials:

1. Seed and nursery catalogs as made available by the various commercial firms

2. Plant tags obtained from commercial firms

3. State Extension Service circulars. Many excellent bulletins are available. Write to the State Extension Service in your state.

Filmstrips, slides and films:

1. "A Step Ahead--in Careers in Agriculture," 16mm film, color, 14 minutes. Your local New Holland Machinery dealer.

2. "Dynamic Careers Through Agriculture," 16mm film, color, 28 minutes. Farm Film Foundation, 1425 H Street, N.W., Washington D.C.

3. "Getting Along with Others," 16mm film, 29 minutes. Business Education Films, 5113 16th Avenue, Brooklyn, New York.

4. "Your Attitude is Showing," 35mm sound filmstrip, 12 minutes. Charles Steadman, Teacher-Trainer in Distributive Education, University of Pittsburgh, Pittsburgh, Pennsylvania.

5. "Salesmanship Series," 16mm film, B and W, 1959. New York: McGraw-Hill Book Company Inc., with titles as follows:

"The Approach," 10 minutes, $65.00 purchase price.
"Making the Sale," 17 minutes, $100.00 purchase price.

Note to teachers: The films listed above may be available for loan from libraries or audio-visual centers. Other titles in the series which are not particularly applicable to this module are:

"Prospecting," 10 minutes, $65.00 purchase price.
"The Pre-Approach," 10 minutes, $65.00 purchase price.

References:

1. Agricultural Chemicals, 1963. Manufacturing Chemists' Association, Inc., 1825 Connecticut Ave. N.W., Washington 9, D. C.

2. Agriculture is More than Farming, The Future Farmers' Supply Service, P.O. Box 1180, Alexandria, Virginia.

3. Agriculture, The Sextant Series for Exploring Your Future, Milwaukee: American Liberty Press, 1962. Price for copy with soft cover is $4.

4. American Red Cross, First Aid Textbook, Fourth Edition. Available from any Red Cross Chapter.

X 5. Aptitude Tests for Occupations and an Occupational Interest Inventory, 1956, California Test Bureau, 206 Bridge St., New Cumberland, Pennsylvania. Price of specimen set: 75¢.

6. Ball Red Book, Tenth Edition, Chicago: George J. Ball Co., 1960.

7. Blume, George T., Career Exploration, Units I and II, Circular 864, 1962, Agricultural Extension Service, Virginia Polytechnic Institute, Blacksburg, Virginia.

8. Byram, Harold M., Guidance in Agricultural Education, The Interstate Printers and Publishers, (Danville, Illinois), 1959. Price: $4.50.

9. Brooklyn Botanic Garden, Pruning Handbook, Publication No. 28 Brooklyn Botanic Garden (Baltimore, Maryland) Price: $1.

10. Careers Ahead and Challenge in Agriculture. These two bulletins may be ordered from your local land-grant College of Agriculture.

11. Career Opportunities in Ornamental Horticulture, American Association of Nurserymen, 835 Southern Building, Washington, D. C.

12. Catalog of Greenhouse Parts, Supplies, and Accessories, National Greenhouse Company, (Pana, Illinois).

13. Choosing Your Occupation, The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 1962. Price: 15¢ per copy.

14. Christopher, E.P., The Pruning Manual, The Macmillan Company (New York), 1961, Price: $6.95.

15. Christopher, E.P., Introductory Horticulture, McGraw-Hill Book Company, (New York), 1959.

16. Concrete Technology Instructor's Guide, Portland Cement Association, 33 W. Prairie Street, Chicago, Illinois.

17. Conover, H.S., Grounds Maintenance Handbook, Second Edition, McGraw-Hill Book Company, Inc., (New York) 1958, Price: $15.

18. Construction of Plastic Greenhouse, Circular 492, Agricultural Extension Service, Purdue University, (Lafayette, Indiana).

19. The ABC's of Spray Equipment, Third Edition, The DeVilbiss Company, 300 Phillips Ave., Toledo, Ohio.

20. Donahue, Roy L., Our Soils and Their Management, Interstate Printers and Publishers, (Danville, Illinois) 1955.

21. Duncan, Clyde H., Find a Career in Agriculture, G.P. Putman Sons, 200 Madison Avenue, New York, New York, 1961. Price: $2.50.

22. Education, an Investment in People, Education Department, Chamber of Commerce of the United States, Washington, D.C. Price: $1.50.

23. Ernest and DaVall, Salesmanship Fundamentals, Second Edition, McGraw-Hill Book Company, Inc., (New York, New York).

24. Fertilizer Handbook, National Plant Food Institute, 1700 K Street, N.W., Washington, D.C.

25. There's a Future in Your Farm Background, The National Sales Executives, Inc., 630 Third Avenue, (New York, New York), 1958. No charge.

26. Getting Ahead in Retail Selling, The National Cash Register Company, Dayton, Ohio, 17 pages.

27. Greenhouse Construction and Heating, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

28. Hartmann, Hudson and Kester, Plant Propogation: Principles and Practices, Prentice Hall, Inc., (Englewood Cliffs, New Jersey) 1961.

29. Hemp, Paul E. and Alfred H. Krebs, A Study Guide for Placement--Employment Programs in Agricultural Business and Industry, The Interstate Printers and Publishers, (Danville, Illinois) 1964.

30. Home and Garden Supply Merchandiser, Miller Publishing Co., 2501 Wayzata Boulevard, Minneapolis, Minnesota, January, 1965.

31. Hoover, Norman K., Handbook of Agricultural Occupations, The Interstate Printers and Publishers (Danville, Illinois) 1963, Price: $4.75.

32. Hotbeds and Coldframes, F. B. #1743, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

33. How to Erect Farm Fence, Republic Steel, Wire Division, 332 South Michigan Avenue, Chicago 4, Illinois.

34. How to Use a Chain Saw, McCulloch Company, Los Angeles 45, California.

35. Insects: The Yearbook of Agriculture, The U.S. Government Printing Office, Washington 25, D. C., 1952.

36. James, Gerald B., Vocational and Technical Education, Using Current Curriculum Developments, Washington, D. C., Association for Supervision and Curriculum Development, National Education Association, 1963.

37. Janick, Jules, Horticultural Science, W.H. Freeman Company, (San Francisco, California), 1963.

38. Jobs in Agriculture, Science Research Associates, Inc., 259 Erie St., Chicago, Illinois, Price: $1.

39. Keily, Helen J. and R.G. Walters, How to Find and Apply for a Job, Second Edition (paperback), Southwestern Publishing Company, (Cincinnati, Ohio) 1960.

40. Kuder Preference Record, Science Research Associates, Inc., 259 Erie St., Chicago, Illinois, 1954.

41. Laurie, Alex, Kipling, D. C., Nelson, Kenard S. Commercial Flower Forcing, Sixth Edition, McGraw-Hill Book Company (New York, New York), 1958.

42. Laurie, Alex and Ries, Victor. Floriculture: Fundamentals and Practices, McGraw-Hill Book Company, (New York, New York), 1958.

43. McLarney, William J. Management Training, Cases and Principles, Richard D. Irwin, Inc., (Homewood, Illinois), 1959.

44. Moon, Truman J., Paul B. Mann and James R. Otto, Modern Biology, Henry Holt and Company (New York) 1956. Price: $5.50.

45. Morholt, Evelyn, Paul F. Brandwain and Alexander Joseph, A Sourcebook for the Biological Sciences, Harcourt, Brace and Company, New York, 1958.

46. Muensher, W. C. Weeds, Second Edition, The MacMillan Co., (New York, New York), 1962.

47. Musser, H. B. Turf Management, McGraw-Hill Book Company (New York, New York), 1962.

48. National Paint, Varnish, and Lacquer Association, 1500 Rhode Island Avenue, N.W., Washington, D.C., has several publications available pertaining to paints and painting.

49. Nelson, Kenard S., Flower and Plant Production in the Greenhouse, Interstate Printers and Publishers, (Danville, Illinois) 1965.

50. Nelson, William R., Landscaping Your Home, Circular 858, University of Illinois, College of Agriculture, Cooperative Extension Service, Urbana, Illinois.

51. Occupational Brief, No. 166, Science Research Associates, Inc., 259 East Erie St., Chicago 11, Illinois, Price: 35¢.

52. Opportunities for You in the Florist Industry, Society of of American Florists, Sheraton-Park Hotel, Washington 8, D. C., Price: 10¢.

53. Phipps, Lloyd J., Your Opportunities in Vocational Agriculture, The Interstate Printers and Publishers (Danville, Illinois), 1962, Price: $3.25.

54. Pinney, John J., Beginning in the Nursery Business, American Nurserymen, 343 So. Dearborn Street, Chicago, Illinois, Price: $1.

55. Pirone, P.P., Tree Maintenance, Third Edition, Oxford University Press, (New York, New York), 1959, Price: $11.

56. Pirone, Dodge, and Ricket, Diseases and Pests of Ornamental Plants, Third Edition, Ronald Press Co., (New York, New York) 1960, Price: $12.

57. Plant Diseases: The Yearbook of Agriculture, The U.S. Government Printing Office, Washington 25, D.C., 1953.

58. Plastic Greenhouses, Circular 857, University of Illinois, College of Agriculture, Cooperative Extension Service, Urbana, Illinois.

59. Research Report on Plastic Greenhouses, Research Report No. 63, Agriculture Experiment Station, Virginia Polytechnic Institute, Blacksburg, Virginia.

60. Richert, G.H., W.G. Meyer, and P.G. Haines, Retailing Principles and Practices, Fourth Edition, Gregg Publishing Division, McGraw-Hill Book Company, Inc., (New York, New York), 1962.

61. Robinson, Blackler, and Loan, Store Salesmanship, Fifth Edition, Prentice Hall, Inc., (Englewood Cliffs, New Jersey), 1959.

62. Rohm and Haas Company, Compendium of Plant Diseases, The Lakeside Press; R. R. Donnelly and Sons Company, (Chicago, Illinois), 1959.

63. Rowse and Nolan, Fundamentals of Advertising, Sixth Edition, Southwestern Publishing Company (Cincinnati, Ohio), 1957.

64. Schery, Robert W., The Householder's Guide to Outdoor Beauty, Pocket Books, Inc., (New York, New York), 1963, Price: 50¢.

65. Schery, Robert W., The Lawn Book, The McMillan Co., (New York, New York), Price: $5.95.

66. Selection and Use of Spray Painting Equipment, Pamphlet 266, Cooperative Extension Service, Iowa State University, Ames, Iowa.

67. Sferro, Wright, and Rice, Personality and Human Relations, Second Edition, Text-Workbook, Gregg Publishing Division, McGraw-Hill Book Company, (Hightstown, New Jersey), Price: $3.95.

68. Sharvelle, E.G., The Nature and Use of Modern Fungicides, Burgess Press, 426 South Sixth, Minneapolis, Minnesota, 55414.

69. Shurtleff, M.C., How to Control Plant Diseases, The Iowa State University Press, Ames, Iowa, 1962.

70. A Simple Rigid Frame Greenhouse for Home Gardeners, Circular 880, University of Illinois, College of Agriculture, Cooperative Extension Service, Urbana, Illinois.

71. Soils Book, Ninth Edition, published by Successful Farming Magazine, Meredith Publishing Company, 1716 Locust, Des Moines, Iowa 50303.

72. Building Farm Fences, Southern Association for Agricultural Engineering and Vocational Agriculture, Coordinator's Office, Barrow Hall, Athens, Georgia, 1962.

73. Spray Painting Visuals, (A series of illustrations for use with an opaque projector, for making transparencies for overhead projection, or for direct viewing.) Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois.

74. Trees, Shrubs and Vines, State University College of Forestry, Syracuse University, 1961, Price: $1.25. Send remittance with order to Department of Forest Extension, State University College of Forestry, Syracuse 10, New York.

75. Summary of Research Findings in Off-Farm Agricultural Occupations, The Center for Vocational and Technical Education, (Columbus, Ohio), 1965, Price: 50¢.

76. Sunset Editorial Staff, Lawns and Ground Covers, Lane Book Company, (Menlo Park, California), 1964. Price: $1.95.

77. Sunset Series, Basic Gardening Illustrated, Lane Book Company, (Menlo Park, California), 1963. Price: $1.95.

78. Sunset Series, Pruning Handbook, Lane Publishing Company, (Menlo Park, California), Price: $1.95.

79. U.S.D.A. publications available from the Superintendent of Documents, Washington, D.C.

    a. Controlling Menatodes in the Home Garden, FB No. 2048.

    b. Teaching Soil and Water Conservation, A Classroom and Field Guide, PA-341.

    c. Water Intake by Soil, Experiments for High School Students, Miscellaneous Pub. No. 925.

    d. Soils: Yearbook of Agriculture, 1957.

    e. Water: Yearbook of Agriculture, 1955.

X 80. Walker, R.W., G.Z. Stevens and N.K. Hoover, Pennsylvania Vocational Agriculture Interest Inventory, Interstate Printers and Publishers, (Danville, Illinois), Specimen Set. Price: $1.

X 81. Weyant, J. Thomas, Norman K. Hoover, and David R. McClay, An Introduction to Agricultural Business and Industry, Interstate Printers and Publishers, (Danville, Illinois), 1965. A student's text of approximately 200 pages, and a teacher's guide.

X 82. Wilson, Howard, Living With Yourself, (paperback), Administrative Research Associates, Box 3, Deerfield, Illinois, 1962. Price: $1.

X 83. Wilson, Howard, Understanding People (paperback), Administrative Research Associates, Box 3, Deerfield, Illinois, 1962. Price: $1.

84. Wingate and Nolan, Fundamentals of Selling, Seventh Edition, Southwestern Publishing Company, (Cincinnati, Ohio), 1959.

85. Wingate and Weiner, Retail Merchandising, Fifth Edition, Southwestern Publishing Company, (Cincinnati, Ohio), 1957.

THE CENTER FOR RESEARCH AND LEADERSHIP DEVELOPMENT
IN VOCATIONAL AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY
980 KINNEAR ROAD
COLUMBUS, OHIO, 43212

INSTRUCTOR NOTE: As soon as you have completed teaching each module, please record your reaction on this form and return to the above address.

1. Instructor's Name_____

2. Name of school_____State_____

3. Course outline used: _____Agriculture Supply--Sales and Service Occupations
   _____Ornamental Horticulture--Service Occupations
   _____Agricultural Machinery--Service Occupations

4. Name of module evaluated in this report_____

5. To what group (age and/or class description) was this material presented?____
   _____

6. How many students:
   a) Were enrolled in class (total) _____
   b) Participated in studying this module _____
   c) Participated in a related occupational work experience program while you taught this module _____

7. Actual time spent teaching module:

		Recommended time if you were to teach the module again:
_____hours	Classroom Instruction	_____hours
_____hours	Laboratory Experience	_____hours
_____hours	Occupational Experience (Average time for each student participating)	_____hours
_____hours	Total time	_____hours

(RESPOND TO THE FOLLOWING STATEMENTS WITH A CHECK (✓) ALONG THE LINE TO INDICATE YOUR BEST ESTIMATE.)

	VERY APPROPRIATE	NOT APPROPRIATE
8. The suggested time allotments given with this module were:		
9. The suggestions for introducing this module were:		
10. The suggested competencies to be developed were:		
11. For your particular class situation, the level of subject matter content was:		
12. The Suggested Teaching-Learning Activities were:		
13. The Suggested Instructional Materials and References were:		
14. The Suggested Occupational Experiences were:		

(OVER)

15. Was the subject matter content sufficiently detailed to enable you to develop the desired degree of competency in the student? Yes_____No_____
Comments:

16. Was the subject matter content directly related to the type of occupational experience the student received? Yes_____No_____
Comments:

17. List any subject matter items which should be added or deleted:

18. List any additional instructional materials and references which you used or think appropriate:

19. List any additional Teaching-Learning Activities which you feel were particularly successful:

20. List any additional Occupational Work Experiences you used or feel appropriate:

21. What do you see as the major strength of this module?

22. What do you see as the major weakness of this module?

23. Other comments concerning this module:

_____ _____
(Date) (Instructor's Signature)

_____
(School Address)